

PERFORMANCE SPECIFICATION
MANUALS, TECHNICAL: OPERATION AND ASSOCIATED CHECKLIST
(SPACE SYSTEMS)
PREPARATION OF

This specification is approved for use by the Space and Missile Systems Center, Department of the Air Force, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers requirements for the preparation of operation manuals and associated checklists for space systems, to include satellite systems, warning systems, surveillance systems, and spacelift systems.

1.2 Types of manuals. Two types of operation manuals and associated checklists are covered by this specification. The types of manuals and associated checklists to be prepared shall be designated by the acquiring activity.

- a. Operation Manual - See 3.2.
- b. Classified Manual - See 3.3.
- c. Checklist - See 3.4.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: SMC/AXM, 160 Skynet, El Segundo, CA 90245) by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC F4808

AREA TMSS

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards and handbooks. The following specifications, standards and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

STANDARDS

MILITARY

MIL-STD-12	Abbreviations for Use on Drawings and in Specifications, Standards and Technical Documents
MIL-STD-17	Mechanical Symbols
MIL-STD-681	Identification Coding and Application of Hook-Up and Lead Wire
MIL-STD-1840	Automated Interchange of Technical Information
MIL-STD-38784	Manuals, Technical: General Style and Format Requirements

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.3 Non-Government publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/IEEE Y32.2-1975	Graphic Symbols for Electrical and Electronic Diagrams
ANSI/IEEE 200-1975	Electrical and Electronic Parts and Equipment Reference Designators

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated specifications or specification sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 General manner of preparation. Unless otherwise specified, the general manner of preparation of the technical manuals shall be in accordance with MIL-STD-38784. They shall be prepared in the form specified in the contract. All details of MIL-STD-38784 relative to flight manuals which reference "aircraft" flight manuals shall apply to space systems operations manuals. Statements to be included in space systems operation manuals shall be reworded accordingly.

3.1.1 Illustrations.

3.1.1.1 Operation manual illustrations. The operation manual shall contain the following illustrations:

- a. A general arrangement illustration depicting the flow of data between the satellite/sensor, ground system, and users.
- b. Sufficient illustrations to clearly show the ground facility/operations center.
- c. Sufficient other illustrations and diagrams to show the major panels, cabinets, consoles, and related equipment with which crew personnel have contact.
- d. Sufficient diagrams, charts, and schematics to depict the function, control, and interrelationship of significant space system equipment operation, functions, and system or subsystem operation.
- e. Abbreviations, symbols, reference designations and color coding references used in the manual shall be in accordance with MIL-STD-12, ANSI/IEEE Y32.2-1975,

ANSI/IEEE 200-1975, MIL-STD-17 or MIL-STD-681 unless otherwise specified in this specification. For digitized technical data, MIL-STD-1840A shall be used.

3.1.1.2 Types of illustrations. Determination of the type of illustration to be used shall be in accordance with MIL-STD-38784 and as directed by the acquiring activity.

3.1.2 Text.

3.1.2.1 Style of presentation. Text shall be simplified and decreased in quantity by the use of complementary art work. All technical matter shall be reduced to language understandable by the personnel who are expected to use the manual. The target reading grade level for space systems operations manuals shall be "9" as computed in MIL-STD-38784.

3.1.2.2 Paragraph headings. The heading of the first or introductory paragraph of each chapter should be general in nature to facilitate the inclusion of information concerning the main subject. The subordinate paragraph headings should be definitive and identify the principal item to be entered. The heading "General" shall not be used.

3.1.3 Tables of contents. A main table of contents shall be prepared in accordance with MIL-STD-38784. A chapter table of contents shall be included at the beginning of each chapter. The chapter table of contents shall include the page on which each section primary paragraph, or major subject headings within that chapter, are located. When a classified manual is involved, the same principles established for the treatment of the main table of contents shall be followed. The main table of contents shall contain numbers and titles of chapters with their initial page numbers, but shall not contain any classified information.

3.1.4 Security classification. Operations manuals may be classified or unclassified. If the space system classification guide identifies subjects that are required to be operated by crew members as classified, a separate classified manual or a classified supplement to the basic manual will be developed for those classified subjects.

3.2 Operation manual.

3.2.1 Function of the manual. The operation manual shall provide a general description of the space system, the operations plan, and normal and emergency procedural instructions directly associated with and required for conducting operations. The information shall be in sufficient detail to enable a crew member to perform system operations effectively and safely.

3.2.2 Extent of coverage. The space system shall be covered to the extent specified by the using agency based upon operational system requirements.

3.2.3 Arrangement of manual. The manuals shall be arranged in the following order.

- Front Matter
 - Title Page
 - List of Effective Pages
 - Verification Status Sheets
 - Technical Order Equipment Configuration Status Record
 - Foreword
 - Table of Contents
 - List of Illustrations
 - List of Tables
 - Safety Summary
- Chapter 1, Space System Description
- Chapter 2, Space System Operating Functions
- Chapter 3, Normal Operating Procedures
- Chapter 4, Emergency Procedures
- Chapter 5, Malfunction Procedures
- Chapter 6, Operating Limitations
- Chapter 7, Crew Duties and Responsibilities
- Glossary

3.2.3.1 General. The specific requirements of each chapter are covered in detail in paragraph 3.2.4. The listed chapters are mandatory in each manual and additional chapters may be added in special cases with written approval of the acquiring activity. If a chapter is not applicable, the title of that chapter shall be located on the last page of the previous chapter and shall contain a notation to the effect that the chapter is not applicable, or that information shall be added when it becomes available. The chapter title of the chapter shall appear in the main table of contents with an appropriate notation.

3.2.3.1.1 Format. Format for presentation of textual material, amplified procedures, and abbreviated checklist shall be at the discretion of the acquiring activity. Format shall present crew emergency procedures in a simple, concise and understandable layout, consistent with weapon system requirements. For systems employing digitized technical data, the visual template and the text shall be formatted so the screen presentation will be identical to the printed data. If the acquiring agency does not require a printed page of the visual display, the visual display will be formatted to comply with the style and format of a printed page. Each page of the Emergency Procedures chapter shall have a border of 1/4 inch black diagonal hash markings bled to all four edges of the page. Insofar as possible, amplified procedures and attendant checklist developed for a particular weapon system shall be standardized.

3.2.4 Detailed requirements.

3.2.4.1 General. Details for preparation of title page, list of effective pages ("A" page), main table of contents and safety summary shall be governed by MIL-STD-38784.

3.2.4.2 Foreword. The foreword shall discuss the various aspects of the operation manual. Such discussion shall include the scope of the manual; an indication of the technical proficiency expected of using personnel; a discussion of format and content; and, special interest items, e.g., new developments and a brief description of notes, cautions and warnings.

3.2.4.3 Chapter 1, Space System Description. This chapter shall describe the space system and supporting facilities in sufficient detail to afford the reader a single source document of general system information. A brief narrative shall describe the purpose, main features and leading particulars for the space system as described below. Illustrations that clarify a particular system or reduce the verbiage necessary for explanation shall be included.

3.2.4.3.1 Description of the satellite. The description shall be of sufficient detail to provide an understanding of the purpose and function of the subsystems, their relation to overall system operation, and such additional information as to enable the crew member to understand subsystem functions peculiar to the satellite. Subsequent paragraphs shall describe in greater detail subsystems peculiar to that satellite. Such information shall include a general discussion of each major subsystem, for example: spacecraft structure, thermal control, command and control, power distribution, attitude control, propulsion, payload, etc.

3.2.4.3.2 Description of the ground station/sensor. A general description shall be provided of the physical layout, including location and function of support systems, to include security, personnel access, and power systems. Detailed discussion should include ground station/sensor, computer systems and associated support equipment required for system monitoring as they support crew operations. The description shall be of sufficient detail to provide an understanding of the purpose and function of the subsystems, their relation to overall system operation, and such additional information as to enable the crew member to understand subsystem functions peculiar to the ground station/sensor. Such information shall include a general discussion of each major subsystem, for example: communications, antennae, processor systems, power distribution, mission consoles, environmental control, fire detection, vapor sensing, security detection, radiation monitoring.

3.2.4.4 Chapter 2, Space System Operating Functions. This chapter shall emphasize the process required to bring the system to operational capability, status monitoring, alarm response, preparation for mission, and post mission activities. It shall contain a functional explanation of the normal, emergency, and malfunction procedures contained in other chapters of the manual. Flow diagrams shall be presented to support text when it is determined necessary by the acquiring agency. The functional description shall include the following, as applicable.

- a. When the procedure will be accomplished; for example, when directed by engineers, tech control, or applicable operating directives.
- b. Where the procedure will be accomplished; for example, rack, console, or other location.
- c. The time usually required for the system to complete a function.

- d. What is accomplished by the procedure.
- e. Procedure peculiarities, if any.
- f. Identification of the crew interface and actions required to perform the function.

3.2.4.5 Chapter 3, Normal Operating Procedures. This chapter shall contain detailed information required by the crew in the performance of normal system operations. In addition, it shall include briefings and procedures to be conducted during training, evaluations, testing, and such other operations as may be applicable or specifically required by the acquiring activity. Operational procedures shall define individual and crew responsibilities and provide amplified procedures sufficient to ensure complete, accurate, and timely accomplishment of these functions. The contents of this chapter shall include those procedures required to determine system status, maintain system operability, and conduct space system operations. Refer to paragraph 3.4 for types of operating checklists. Operational procedures shall include, but are not restricted to the following as appropriate for the specific space system:

- a. Changeover Procedures.
- b. Status and Fault Monitoring.
- c. Activity Coordination Procedures.
- d. Safety Procedures.
- e. System Test Procedures.
- f. Communications Equipment Procedures.

3.2.4.5.1 Crew procedures. Insofar as possible, crew procedures common to all space systems should be identified by common titles. Amplified procedures should tell who, what, where, why and how.

3.2.4.5.2 Changeover procedures. Crew changeover procedures shall be included to facilitate the assumption of duties by the on-coming crew. These procedures shall include those actions that will enable both the duty crew and the relief crew to review, examine, and determine system status. Procedures that would materially assist in accomplishing an effective crew changeover shall be included.

3.2.4.5.3 Status and fault monitoring. Space system status received at the operations center may be presented by indications, printouts and alarms. When abnormal indications occur, the operator will be given instructions on the best method of prioritizing crew actions and reacting to the indications. Instructions must provide clear direction for the crew to understand and react to these

stimuli and to be able to perform normal and malfunction procedures, to isolate the condition and maintain maximum space system capability.

3.2.4.5.4 Activity coordination procedures. These procedures shall include information required by crew members to accomplish their duty assignments. Information shall advise crews of scheduled activities, operational, maintenance and support tasks, and emergency procedures. The purpose of activity coordination is to assure safe and correct procedures are followed during the performance of any function involving on-site equipment. It is the responsibility of the crew commander/crew chief to ensure personnel are thoroughly informed on all aspects of the activity to be conducted. This shall include, but not be restricted to, communications, normal, malfunction, emergency and contingency procedures in progress or anticipated.

3.2.4.5.6 System test procedures. These procedures shall provide the crew with a verification of operational capability and system status. The extent and complexity of these procedures shall depend on the particular space system. System test procedures are designed to augment the verification of system status and enhance the ability of the crew to problem isolate and restore the space system to full operational capability. These procedures shall be placed in an abbreviated checklist if deemed necessary by the acquiring agency.

- a. Verification/inspection procedures performed by other than crew members shall not be included in the operation manual.
- b. Equipment status verified by crew personnel during the verification / inspection shall include, but isn't limited to, essential items of power, payload, communications, computer processing, and securing of simulation media. Equipment requiring status verification less frequently (as defined by the operating activity) shall be contained in other space system technical orders.

3.2.4.5.7 Communications equipment procedures. Crew activities required to inspect, start-up, initialize and to perform test shall be provided. The acquiring agency may request a stand-alone operations manuals for complex or highly integrated communications equipment.

3.2.4.6 Chapter 4, Emergency Procedures. This chapter shall describe the procedures to be followed in meeting emergencies that might reasonably occur during the course of an operational shift. It shall include specific crew reactions required to correct or contain emergency conditions or prohibit crew actions in accordance with established directives. Safety hazards, emergency operational procedures and emergency situations shall be clearly defined to ensure crew recognition of any emergency condition. The contents of this chapter shall be limited to those emergency conditions, personnel actions and safety factors which, if implemented, could reasonably reduce the possibility of personnel injury, equipment damage, or space system degradation. If appropriate, procedures shall include information prohibiting certain crew actions which, if accomplished, would violate established space system safety directives.

3.2.4.6.1 Content. This chapter shall include procedures designed for crew identification of emergency conditions and corrective actions. Additional safety information may be included, but

shall be restricted to, items of personnel safety; i.e., high voltages, high pressures, and environmental hazards, but shall not include items of a purely first-aid nature. This chapter shall include procedures, as applicable to the space system, for use during a fire or overheat situation, hazard situation, and security system violations.

3.2.4.7 Chapter 5, Malfunction Procedures. Crew maintenance procedures shall be located in this chapter. This chapter shall contain information for identification, isolation, and correction of system malfunctions that occur during normal operations. The information shall indicate the effect of the malfunction on the system, probable cause, and corrective action. The information shall be of sufficient scope and detail to enable crew personnel to accomplish appropriate procedures using authorized documentation or under the direction of competent technical authority. Malfunction identification procedures shall be developed to afford ready reference to a particular malfunctioning system/subsystem, and the malfunction indication within that system/subsystem. The procedures shall be as direct and simple as possible, consistent with the action necessary to remedy the malfunction. At the direction of the acquiring activity, remedial actions shall be given in this chapter. On those systems which have redundant or backup equipment, the required procedures to maintain operability shall be provided. Presentation of malfunction analysis procedures shall be standardized within a space system insofar as possible.

3.2.4.8 Chapter 6, Operating Limitations. This chapter shall contain those limitations which impose operating restrictions, affect system accuracy or otherwise adversely affect system operation or capability as a result of system configuration, operational consideration and environmental restrictions, as applicable. Operating limitations, resulting from equipment or system malfunctions shall be contained in Chapters 4 and 5. It shall include a description of each specific limitation and its application to the space system. In discussing limitations, applicable tables and graphs shall be included. Operational limitations of a classified nature shall be included in a classified supplement to the operation manual (see 3.3). Detailed information on restrictions peculiar to the space system shall be included. Following are examples of specific limitations:

- a. Limitations on range and azimuth.
- b. Power restrictions.
- c. Radiation Hazard (RADHAZ).
- d. Environmental restrictions.
- e. Countdown hold restrictions.

3.2.4.9 Chapter 7, Crew Duties and Responsibilities. The title, duties and responsibilities of individual crew positions required to safely and effectively monitor/operate the space system during normal operations shall be included. Titles of crew positions shall be standardized within each space system and, if at all possible, standard titles should be extended throughout the missile warning/space surveillance, satellite operations, and launch systems. This chapter shall be

composed entirely of information furnished by the operating organization and shall contain no information for which engineering responsibility could become an issue.

3.2.4.10 Glossary. Inclusion of a glossary in the operation manual shall be mandatory. The contents shall be arranged in alphabetical sequence and shall include technical terms, definitions, and abbreviations peculiar to the space system.

3.3 Classified material.

3.3.1 Format and content requirements. The format and contents of the classified manual shall be identical to the unclassified manual which it supports. Arrangement and presentation of data shall be in accordance with the applicable requirements established for the corresponding unclassified manual, plus such additional requirements as determined by the acquiring activity. A foreword shall be included covering the scope and content of the classified manual. A classified manual shall be published only when determined absolutely necessary.

3.3.2 Reference between the classified manual and the basic manual. Both manuals shall completely cross reference one another. The method of referencing shall be identical in that the title pages and table of contents will reference one another.

3.4 Operations checklist. Where separate attendant checklists are specified by the acquiring activity, this paragraph shall apply. The abbreviated operation checklist for use with specific space systems shall be prepared jointly by the contractor and using command or by the supporting organization under the supervision of the acquiring activity. Verification of checklist procedures shall be accomplished by the appropriate operations group prior to final publication. Unless authorized, preliminary procedures shall not be published to support operational requirements of the using agency. Checklists shall contain only that information necessary to safely and effectively accomplish the required task. The checklist shall tell only what to do and when to do it, not how to do the work. An abbreviated operational checklist shall be prepared when one or more of the following conditions exist:

- a. Communication between individuals is necessary to control or monitor task progression.
- b. Potential damage or degradation to equipment which would reduce operational readiness or adversely affect operational capability.
- c. Potential injury to personnel unless prescribed procedures are followed.

3.4.1 Types of checklists. Checklists shall be Type I (Non-Integrated) and Type II (Integrated). Publication of classified checklists of Types I and II shall be held to a minimum and shall be accomplished only with the approval of the acquiring activity.

3.4.1.1 Non-Integrated checklist. This checklist shall contain procedures where the actions are functionally independent of any other action or procedures. Examples of a non-integrated operational checklist include test control procedures and changeover briefing.

3.4.1.2 Integrated checklist. Integrated checklist shall contain procedures where the actions are functionally integrated between two or more crew members. Examples of an integrated checklist include site reporting procedures and evacuation procedures.

3.4.2 Contents. Checklist data shall include instructions that duplicate, in abbreviated form, corresponding actions contained in the amplified procedures. The data shall be presented in demand-response format and shall be limited to material necessary to accomplish the action. The data shall be in double column format, with demands listed in the left hand column and response in the right hand column. Placard information and response shall be printed in upper case letters or figures; e.g., CONSOLE POWER indicator .. OUT. Demand-response presentation need not consist of complete sentences. Leaders, i.e., SPACE OBJECT IDENTIFICATION CONSOLE, shall be inserted between the columns on the left side of the page. When more than one crew member is required to perform a required action on a page, the appropriate crew position; i.e., CCH, SCO, may be entered in the action column on the left hand side and in line with the action to be accomplished.

3.4.2.1 Cross references. Reference to applicable operation or maintenance manual(s) chapter and paragraph required to correct a malfunction or continue a countdown shall be listed immediately following the task. Inclusion of such additional data shall be limited to information essential to accomplishing the tasks and shall be included only when absolutely necessary.

3.4.2.2 Blank pages. Reverse side of checklist pages intentionally left blank shall not contain a statement to that effect. Numbers of the blank pages shall appear on the preceding page immediately following that page number and separated therefrom by a slash(/). For example: 3-17/3-18. 3-18 being the blank page.

3.4.2.3 Page changes. When numbering continuity is broken by deletion of pages by change, the page deletions shall be referenced in the list of effective pages. A statement indicating the deletions shall be placed in the bottom margin of the preceding page or the top margin of the following page to show reason for the break in page number continuity. The statement shall be in the following form: "All data on Page , Figures , deleted." When changes to a function within the emergency procedures checklist result in addition or deletion of steps within the function, the entire function shall be reissued to avoid any break in sequential page or step numbering and to prevent any pages or major portions of any page within the function from being blank.

3.4.2.4 Warnings, cautions and notes. Inclusion of warnings, cautions and notes shall be in compliance with the provisions of MIL-STD-38784. Using agencies shall ensure that inclusion of special notices be held to an absolute minimum consistent with procedural requirements. When included, warnings, cautions and notes shall precede the action to which they refer.

3.4.2.5 Demand-Response procedures. In lieu of separate checklists, demand-response procedures for use with specific space systems shall be prepared for lengthy and/or critical procedures. The contractor and using command shall jointly determine which procedures are demand-response. Demand-response procedures shall contain only that information necessary to safely and

effectively accomplish the required task. The format of the demand-response procedures shall be standardized across space and missile systems and shall have the following characteristics:

- a. Each demand-response procedure shall start at the top of a page.
- b. Demand-response procedures shall be identified at the top and bottom of each page.
- c. All illustrations shall be located at the rear of the chapter or section to which they apply.
- d. Narrative procedures shall be placed in the front of the appropriate chapters and the demand-response procedures will be arranged sequentially thereafter. The narrative descriptions should be in Chapter 2, and only the procedures should be in Chapters 3, 4, and 5.
- e. Each step of a demand-response procedure shall be numbered. There will be no lettered sub-steps in the demand-response procedures.
- f. Procedures shall be paragraph numbered. Steps shall be followed by a blank (underlined) to allow for check marking by the operator.
- g. Responses, where used, shall be capitalized.
- h. Introductory text (lead-in paragraphs) shall not be included in demand-response procedures, but shall appear in Chapter 2.
- i. "Lead-in" statements referring to particular items of equipment or alternative actions shall be underlined.
 - (1) Where lead-ins reference nomenclature and steps, the nomenclature shall be referenced first, followed by applicable steps; e.g., SPACE CONTROL PANEL, steps 9 - 11.
- j. Amplification of steps shall be included when necessary.
 - (1) When required by system complexity.
 - (2) When necessary to explain how or when.
 - (a) For "if required" steps.
 - (b) For steps which indicate options.
- k. The demand portion of a demand-response procedural step shall contain capital letters as follows:

(1) The first letter of the first word.

(2) Equipment nomenclature.

l. Information applying to several steps shall be presented as a NOTE or lead-in sentence as best suits the situation.

m. The response portion of a demand-response procedural step shall be capitalized.

n. Established crew coding criteria shall be used. (CMDR/CCH/SCO/GSO).

o. The demand-response procedural step shall contain actions to be checked, observed, or verified, and arranged in order of the performance.

p. Applicable Warnings and Cautions pertaining to personnel injury or equipment damage shall be included in the procedures.

3.4.3 Emergency procedures checklist. A separate and distinctive checklist shall be prepared covering appropriate emergency amplified procedures in Chapter 4 of the operation manual. Emergency procedures checklist shall be restricted to those crew procedures required to save the equipment or prevent injury to personnel. Pages within the emergency procedures checklist shall be prepared to the same format as the normal procedures checklist except that they shall have a border of 1/4 inch blank diagonal hash markings bled to all four edges of the page.

4. VERIFICATION.

Quality assurance provisions shall be in accordance with MIL-STD-38784.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Points packaging activity within the Military Department or Defense Agency, or within the Military Departments System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature which may be helpful, but is not mandatory.)

6.1 Intended use. Technical manuals prepared in accordance with this specification are intended to provide operating procedures for space system operators.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- a. Title, number and date of the specification.
- b. Issue of DODISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1).
- c. Packaging requirements (see 5.1)

6.3 Technical manuals. The requirement for technical manuals should be considered when this specification is applied on a contract. If technical manuals are required, specifications and standards that have been cleared and listed in DoD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL) must be listed on a separate Contract Data Requirements List (DD Form 1423), which is included as an exhibit to the contract. The technical manuals must be acquired under separate contract line item in the contract.

6.4 Subject term (key word) listing.

Checklists
Illustrations
Operation Manuals

CONCLUDING MATERIAL

Custodian: Air Force 19

Preparing Activity: Air Force 19
(Project TMSS F636)

Review Activities: Air Force 16, 33